U.S. Department of Commerce

National Institute of Standards and Technology Gaithersburg, MD 20899

Certificate Number: 90-069A2

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National Type Evaluation Program

Certificate of Conformance

for Weighing and Measuring Devices

For:

Platform Weighing Receiving Element Low Profile-Load Cell Electronic Model: FH-XXYYYY-II*

n_{max}: 5000; e_{min}: 5 lb Capacity: 5000 lb to 20 000 lb Platform: 2' x 2' to 12' x 10'

Accuracy Class: III

Submitted by:

Cardinal Scale Manufacturing Co.

203 East Daughtery

P. O. Box 151

Webb City, MO 64870 Tel: (417) 673-4631 Fax: (417) 673-5001

Contact: Stephen Langford

Standard Features and Options

Load Cell: (4) Cardinal Models SB-2500S, SB-5000S, and SB-10000S or certified equivalent.

* Model number denotes capacity and platform size, where XX is the capacity in thousands of pounds and YYYY describes the platform dimensions in feet.

Model numbers of weighing elements covered by this certificate are in the range of FH 522-II to FH 201210-II, inclusive (see below).

Model Number	Maximum Platform Area (sq ft)	Capacity (lb)	Load Cells
FH-5YY-II	35	5000	SB-2500S
FH-10YY-II	63	10 000	SB-5000S
FH-20YYYY-II	120	20 000	SB-10000S

Load cells used: Cardinal Detecto SB Series (Certificate of Conformance Number 87-059A1)

Temperature Range: $-10~^{\circ}\text{C}$ to $40~^{\circ}\text{C}$ ($14~^{\circ}\text{F}$ to $104~^{\circ}\text{F}$)

This device was evaluated under the National Type Evaluation Program (NTEP) and was found to comply with the applicable technical requirements of Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: January 20, 1998

Gilbert M. Ugiansky, Ph.D. Chief, Office of Weights and Measures
Issue Date: June 2, 1998

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Cardinal Scale Manufacturing Co. Low Profile-Load Cell Electronic Platform Weighing Receiving Element Model: FH XXYYYY-II

Application: General purpose floor scale.

<u>Identification</u>: The identification plate is riveted on the side of the scale base.

Sealing: A wire security seal can be threaded through drilled head screws, securing the access to the load cell junction box on the bottom of the weighing element or access cover from top.

<u>Test Conditions:</u> This Certificate supersedes Certificate of Conformance Number 90-069A1 and is issued to increase the platform area to 120 sq ft. A Model FH 201210-II (20 000 lb x 5 lb capacity, 12' x 10') was tested initially by performing four increasing/decreasing load tests to capacity. In addition, two corner tests at 5000 lb and two shift tests at 10 000 lb were conducted. The tests were repeated after the device was used for over 21 days and over 300 weighments.

The previous test conditions are repeated below.

<u>Certificate of Conformance Number 90-069A1:</u> The Model FH 2075-II (20 000 lb x 5 lb capacity, 7' x 5') was tested initially by performing four increasing/decreasing load tests to capacity. In addition, two corner tests at 5000 lb and two shift tests at 10 000 lb were conducted. The tests were repeated after the device the device was used for over 21 days and over 300 weighments.

<u>Certificate of Conformance Number 90-069</u>: The Model FH 10106-II, 10 000 lb capacity weighing element was installed with a Cardinal Model 738 indicator for this evaluation. Two increasing/decreasing load tests were conducted with 10 000 lb of test weights. In addition, two corner tests at 2500 lb and two shift tests at 5000 lb were conducted. These tests were repeated approximately 30 days later. The Model FH 575-II, 5000 lb capacity, was evaluated with three increasing/decreasing load tests using 5000 lb of test weights. In addition, two corner tests at 1250 lb and two shift tests at 2500 lb were conducted. These tests were repeated approximately 30 days later.

The results of these evaluations indicate the device complies with applicable requirements of NIST Handbook 44.

Type Evaluation Criteria Used: NIST Handbook 44, 1998 Edition

<u>Tested By:</u> S. Cook (CA), S. Barron (CA), G. Castro (CA), Jody Schofield (MO) 90-069; B. Badenhop (OH) 90-069A1; C. Carter (OK) 90-069A2